

ABSTRACT OF THE DISCLOSURE

An electronic endoscope apparatus has a single coaxial cable installed between a scope A and a processor unit B. Waveform superimposing circuits superimpose a video signal on power transmitted through the coaxial cable and sequentially superimpose scope-side reference pulses and processor-side reference pulses alternately on horizontal scanning blanking periods in one field of the video signal. At the same time, the scope A and processor unit B generate reference signals and various timing signals synchronized with the reference pulses of the counterpart and perform video processing based on them. This enables accurate sampling even when scopes with different pixel counts are used. Also, a scope information signal and electronic shutter control signal may be superimposed on a predetermined blanking period in the video signal. Alternatively, an electromagnetic coupler may be installed instead of the coaxial cable and the video signal and reference pulses may be superimposed on AC power supplied electromagnetically.